BITS
computing&communications news

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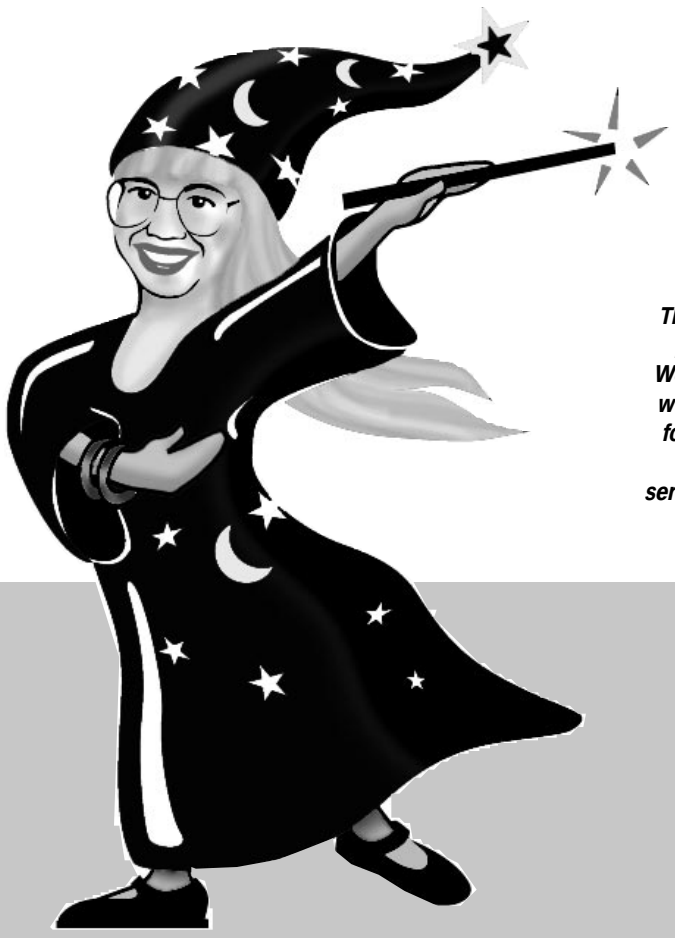
COMPUTING, INFORMATION, AND COMMUNICATIONS (CIC) DIVISION • LOS ALAMOS NATIONAL LABORATORY



The Web Mistress, Laurie McGavran (CIC-12), is the first point of contact for the Laboratory's home pages on the World Wide Web. Laurie answers all e-mail addressed to www@lanl.gov and the mail submitted via the comments form on the Laboratory's home page. She works with the rest of the Laboratory's Core Web team to manage the services provided by these Web pages. For details see the article on page 6 in this issue.

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CIC Customer Service Center . . . . . (505) 665-4444 or cichelp@lanl.gov

Integrated Computing Network (ICN)

Consulting:

Centralized scientific and engineering computing .....consult@lanl.gov or 7-5746

Lab-wide administrative and business systems.....labwide@lanl.gov or 7-9444

Passwords (required for access to ICN) .....validate@lanl.gov or 5-1805

Systems documentation (local and vendor supplied).....7-6992

Central Computing Facility (CCF).....7-4584

Advanced Computing Laboratory (ACL).....5-4530

Desktop Support Center (DSC) 7-4357 (7-HELP)

(PC Help for IBM and Macintosh personal computers)

For questions about PC software: PCSW-help@lanl.gov or 7-5884

For questions about PC hardware: PCHW-help@lanl.gov or 7-9372

For Macintosh questions: Mac-help@lanl.gov or 5-1361

For UNIX questions: UNIX-help@lanl.gov or 5-0433

For groups with CIC-2 support contracts: 5-2220

Telephone Services Center.....7-3400

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(Macintosh/IBM software, lending library)

List of Forms and Schedules

New Computer Programs Support Environmental Cleanup

They're cleaning up Los Alamos, "faster, better, cheaper." They're the Environmental Restoration (ER) Project personnel who are responsible for assessing and cleaning up former and current Laboratory sites that are potentially contaminated. In the investigation phase, these personnel research the site's history, determine sampling approaches, perform site surveys, and collect soil and water samples for laboratory analysis. The five field units in the ER Project, headed by Program Manager Jorg Jansen, can generate samples at a rate of up to hundreds per day. Each of these samples must be accompanied by a stack of paperwork, creating a situation ripe for the replacement of paper-intensive records with efficient computer-generated records.

Beverly Martin of the Applications Programming Group (CIC-12) is an integral part of the ER Project's Field Unit 1 team. She is responsible for her field unit's electronic sample data management system. Collaborating with Judith Cohn of ICF Kaiser and working under the direction of Field Project Leader Garry Allen, Martin developed the electronic system that serves the field unit. In addition to providing a more efficient means for producing and archiving chain-of-custody documentation and sample collection logs for each sample, the system also automatically produces a label for each sample container that identifies the sample location, sample identification number, and the analyses requested. The system also serves as a direct interface with the Sample Management Office (SMO), which is the link between the ER Project and outside analytical laboratories, and with the Facility for Information Management, Analysis, and Display (FIMAD), which is the final repository for all sampling information. This means that the information accompanying each sample no longer needs to be re-keyed as the sample moves from the sampling team to the SMO and ultimately to the analytical laboratory, nor when the sample information is uploaded to FIMAD.

Before the electronic sample data management system, data were imported to FIMAD in a variety of formats, an inefficient procedure that often lead to inconsistencies. The system needed standardization. With the new electronic system, field sampling information is loaded onto a 4-D server that everyone in the local field unit can access. From there, the data are uploaded directly to a FIMAD Oracle (UNIX-based) database where all of the sampling information for each of the five units is archived. Ekkehard Koch, a fellow CIC-12 employee, refined the interface between the 4-D server and the FIMAD database, making it consistent with other Los Alamos National Laboratory 4-D systems. Currently, there are plans to directly upload the results from laboratory analyses into the FIMAD database. Once this plan is implemented, the FIMAD database will be able to track samples from cradle to grave for the entire ER Project.

CIC-12's Beverly Martin serves as Field Operations Manager for Field Unit One of the Environmental Restoration Project. In this photo she is making a site visit during the shrapnel cleanup of Bayo Canyon.

The ER Project's electronic sample data management system supplies the information used to produce Resource Conservation and Recovery Act Facility Investigation reports. These reports detail the site history, document the field investigation, present the analytical results and the screening and risk assessments performed on the results, and provide the recommendations for the site, which range from no further action to expedited cleanup. These reports ultimately go through the Department of Energy (DOE) to the Environmental Protection Agency, where approval for the recommended action is either granted or denied.

Martin presented the electronic sample data management system to DOE's 1995 Technology Information and Exchange Workshop. She also contributed to a poster session at DOE's Environmental Restoration '95 conference, showing how the system she and Cohn developed for two ER Project field units became the project-wide Macintosh standard for documenting field operations. In talking to attendees at these two conferences, Martin discovered that the Laboratory's ER Project is ahead of many DOE environmental restoration organizations in its use of an electronic system for managing sample data. While all of the DOE organizations are interested in such systems, most do not currently have automated systems at the field level.

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Communications Arts and Services (CIC-1)

Holiday Schedule for CIC Computing Service

During the Laboratory closure for the Christmas holidays, December 23, 1995, through January 1, 1996, some of the computing services normally offered by CIC Division will be unavailable. However, some of these services will be maintained at a minimum operating level. The following sections provide information about specific services.

CIC Division Facilities: Major electrical and mechanical maintenance and upgrades are being tentatively scheduled for December 27 and 28 in buildings SM-132 (CCF), SM-1498 (LDCC), and SM-200. As a result of these activities no ICN computing services will be available during this portion of the holiday closure. We apologize in advance for the interruption to computing and for any inconvenience these activities may cause. For additional information contact the Division Facilities Management Group (CIC-18) at 667-4890.

CM200 Computers and Cray Supercomputers: From 16:00, December 24, until 07:00, December 26, the CM200 computers and the Cray supercomputers will run unattended. Any problems encountered during this time will not be resolved until after 07:00, December 26. The CFS (Common File System) will be available but with limited capability as no tapes will be mounted during this time.

At 07:00, December 27, work will begin on electrical substation maintenance and modification which will result in a power outage for one to two days. Consequently, the CM200 computers and the Cray supercomputers will be unavailable from 07:00, December 27, until power is restored. Although the maintenance and upgrading work is scheduled for December 27 and 28, it may be completed as soon as the evening of December 27. Customers should contact CCF (Central Computing Facility) operations at 667-4584 for status. All holiday closure times not covered above will be staffed by skeletal operations and on-call staff.

Cluster Computers: During the holiday closure, the cluster computers will be left running, but they will not be supported. This means customers can access and use the cluster, but if they have problems or a machine goes down, help will not be available until the Laboratory resumes normal operations on January 2. The cluster machines will be on UPS (uninterrupted power supply) and therefore should not be affected by the maintenance and upgrading work being done on December 27 and 28 or by any other power anomalies that might occur.

Remote-Backup File Service Provided by CFS

The CFS (common file system) service has been upgraded to provide readily available storage of files at a remote site. The primary purpose for this feature is to encourage remote backup of critical customer files within the CFS. This new remote capability is provided for both the Secure and the Open Networks.

Since its inception, CFS has had the capability to separate backup copies of files by using the "group=A" and "group=B" options. The group option guaranteed that the two copies would never be stored on the same physical media, hence, could never be destroyed by a single failure. In the recent past, a "use=VAULT" option was added to CFS to provide for remote storage of copies of critical files. This option was somewhat inconvenient to use because it required the manual movement of tapes to the remote site, causing day-long delays in the safe storing and retrieving of files.

The new remote storage capability also uses the "use=VAULT" option as the user mechanism to designate files for remote storage. However, CFS now has remotely located tape-storage hardware to provide quick response for both storing and retrieving files. This remote storage is not designed to provide the same level of performance as the main CFS, but it will be available without long delays. Since "use=VAULT" is a parameter for each separate file, its use is independent of the location in the customer's CFS directory structure.

To use the new capability for your critical files, you can use any of the following command sets.

Command Set #1

```
store  critical_file

store  use=vault  critcal_file : critical_file.bu
```

These two commands store the local file, critical_file, under two different names in two separate steps.

Command Set #2

```
store  critical_file  critical_file : critical_file.bu

modify  critical_file.bu  nuse=vault
```

These two commands store the local file, critical_file, under two different names in one step and then modify the use parameter for the backup copy afterward.

Command Set #3

```
tore  critical_file

copy  critical_file to critical_file.bu  nuse=vault
```

These two commands store the local file, critical_file, and then make a copy of it with the vault option set.

The end effect of all three of these command sets is identical. The only difference would be that the third would probably run faster because it requires only one transmission of the file over the network.

The cost for storing vaulted data is the same as for archived CFS files, $7.50 per gigabyte per month (providing CCF recharge rates are approved in their current form). The cost of this service, at least initially, is being kept low so that customers are not penalized for making duplicate copies of critical files. However, hardware support for the vault capability is designed to discourage its daily use for CFS storage. Because this is a "tape only" service, using a small number of older technology tape drives, the performance will be much less than regular CFS storage, where most requests are satisfied with disk storage or tapes are mounted immediately without queuing. If there are abuses of this price structure, we will have to reconsider this approach as the year progresses.

This new level of service for CFS provides higher reliability for critical files stored on CFS. The vault facility has 12-inch thick walls and of course is located within a secure area. The facility and its location have been reviewed by FSS division and determined to be a secure location for the remote storage of critical files.

CFS has always had off-site backup of its own metadata and parameter files. Likewise, a very high level of disaster recovery capability is available with the new facility.

If you have questions or need more information for your particular application, please contact Tyce McLarty at 667-6034 or ttm@lanl.gov.

Tyce McLarty, Data Storage Systems Group (CIC-11)

ABI/INFORM Business Periodicals Database Now Available at Your Desktop

The ABI/INFORM Business Periodicals Database is now available to the Laboratory community. It is one of several databases the Research Library (CIC-14) will be releasing in the next few months that can be searched at no cost from your desktop.

The database features abstracts and citations to articles from over 1,000 academic, management, marketing, and business journals. It also includes comprehensive information on European business issues in over 200 indexed international journals. Coverage begins in 1985 and is updated monthly. To access this database, "telnet" to CIC-14's on-line catalog at library.lanl.gov or visit our Web page (http://lib-www.lanl.gov) and select Electronic Databases.

Future enhancements of this database will include the ability to request full-image copies of articles from over 400 of the journals indexed. If you need full-image or full-text copies of articles now, send e-mail to library@lanl.gov and a copy will be mailed or faxed to you at no charge providing the article is available.

The ABI/INFORM search screen interface should look familiar since it uses the same software as CIC-14's on-line catalog. So if you have searched our on-line catalog, you can quickly learn to search this database. Training will be offered in December. Contact Lou Pray (667-5809 or lpray@lanl.gov) to arrange group or individual training sessions.

Lou Pray, Research Librarian
Research Library (CIC-14)

IA Project Proposes Web Publication Guidelines

All Laboratory authors are subject to twin, competing pressures: the pressure to publish as much as possible and the pressure to protect information as much as necessary. For those of us who publish on the open Internet/World Wide Web, the technological capabilities of the Web only increase these pressures.

Furthermore, Web authors face the difficulty of trying to make sense out of regulations and policies that were designed for limited types of static printed documents. Trying to apply these to a dynamic electronic environment is a challenge at best—and something much worse when the regulations and policies themselves offer conflicts and contradictions.

To help address this situation, the Information Architecture (IA) project has issued proposed guidelines for publishing on the open Internet/WWW. These guidelines, and the background issues, are discussed below.

Publish or Perish

Reasons to publish can be divided into three basic classes: personal, Laboratory, and global. Each class complements the others, and all contribute to the overall pressure.

Personal reasons range from "showing off" (just liking to see our materials out there) to professional advancement (we are, after all, managed by a university). In acknowledgment of these reasons, the Laboratory Administrative Manual states, "The Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish" (AM 719).

Laboratory reasons include good PR (demonstrating our value to the public) and good business (giving people timely access to the information they need to do their jobs). Particularly within the context of the Workforce Productivity Project, the Web's support of shared information and reduced duplication of effort gains importance.

The "global" pressure basically boils down to the following:

- we are a publicly funded institution;
- taxpayers pay for our resources and work;
- taxpayers therefore own and are entitled, as much as possible, to access the information that is the product of our work.

It is within this global context that DOE Order 1430.1D states, "In order to achieve DOE missions, scientific and technical information generated and acquired by the Department will be made broadly available to all appropriate customers, within applicable law and Departmental requirements, using the most cost-effective and easily accessible mechanisms." Similarly, Appendix F to the Laboratory's prime contract states, "Information will be made available rapidly and cost effectively and will be widely shared with the public, industrial partners and stakeholders, as appropriate."

The IA project recognizes these pressures to publish in two of its fundamental principles:

IA Principle #2: Shared information is the foundation of a unified Laboratory.

IA Principle #3: Access to information is the rule, not the exception.

Documents Aren't Classified; Information Is

Even when access to information is the rule, there are exceptions—especially in the context of the open Internet/WWW, where everything is easily accessible from Santa Fe to Tehran. All of the protection given printed documents needs to be extended to the Web, including both controlling access and securing rights.

Access control means simply not posting anything that isn't suitable for the whole world to read. Classified information never belongs on the open Internet/Web, nor does sensitive information (CRADA, OUO, Export Control, etc.). Moreover, since everything we post represents the Laboratory to the outside world, we need to strive to remain objective, avoiding public bias for or against vendors, political points of view, etc.

Securing rights involves copyrighting publications and patenting inventions to protect the public's right to the intellectual property we create. Creating a copyright is as simple as stating it, but it is only binding if we can also demonstrate the date it took effect.

The IA project recognizes the need to protect information in two of its principles:

IA Principle #4: Security is designed into our data, products, and services.

IA Principle #18: We conduct computing and information activities in a responsible manner, complying with applicable laws, orders, and regulations.

Information Architecture Guidance

The IA project has proposed a series of guidelines for balancing the pressures to publish and protect information within the

context of the Internet/Web. (At the time of this writing, the proposed guidelines have been published as requests for comment. They do not represent IA policy, but they do indicate the direction in which the IA is moving.)

The proposed guidance begins with tests to determine whether material should be published and, if it should, whether it needs classification review and/or publication release. The guidance then explains the classification review and publications release procedure, along with suggested strategies to implement the procedure for the Web. Finally, the guidance recommends templates for a standard copyright notice and disclaimer.

Initial Tests

The IA proposed guideline "IA-5A06: Guidelines for Publishing on the Open Internet/WWW" offers three tests to determine how materials should be published:

1. Is the material appropriate for publishing? In addition to protecting classified and sensitive information, published materials should demonstrate professional, ethical, and courteous use. Materials that do not meet this test should not be published.

2. Does the material contain scientific or technical information? If so, it is covered by DOE orders 1340.1B and 1430.1D and must undergo classification review and publication release prior to publishing.

3. If the material were printed for distribution, would it be considered a "publication" (a journal article, report, etc.)? If so, it must undergo publication release prior to publishing.

If the material is appropriate for publishing but does not contain scientific/technical information and is not a "publication," it can be published without prior review or release.

For example, a typical Web home page is basically a navigation tool. It contains links to information, but rarely offers scientific/technical information itself and would rarely be printed as a "publication." Hence, most home pages can be posted without any prior review or release.

By contrast, an LA-series report usually includes technical information, is definitely a "publication" if printed, and is subject to both classification review and publication release.

Between these extremes are a range of materials, some warranting the protection afforded by classification review and publication release, others not. Further details are available in the IA proposed guideline itself.

Classification Review and Publication Release

As described in "IA-5A07: Classification Review and Publication Release for Internet/WWW Publications," the Classification Group (FSS-16) coordinates the review and release of all materials that qualify under the previous tests. This is essentially the same process that is used for printed reports, though it is hoped that an electronic mechanism can be implemented in the near future.

The process basically includes the following:

1. Obtain group office approval, as needed. This is called for in the Administrative Manual AM 719, though it is left to each group to determine how to implement the policy. This step can also be performed concurrently with the next steps to reduce the overall time required.

2. Submit printed copies of the materials to your Authorized Derivative Classifier (ADC). Standard forms and cover sheets are available via IA-5A07 on the Web. This step is optional, since it can also be performed by FSS-16 in the next step.

3. Submit printed copies of the materials to Publications Release, FSS-16. This group will complete the classification review, coordinate a patent review, register and archive the publication for future reference, and assign a Los Alamos Unlimited Release (LA-UR) number.

After FSS-16 assigns the LA-UR number, the materials are ready for publishing.

There are several strategies to streamline this process for Web publications. For instance, a collection of related materials can be combined under a single LA-UR to save time and effort. For further details about these strategies, see IA-5A07 on the Web.

Copyright Notice and Disclaimer

"IA-5A08: Standard Laboratory Copyright Notice for Internet/WWW Publications" proposes a copyright notice that folds together applicable elements from the Laboratory's software copyright notice and contract statement, as defined in the Publications Manual. This notice serves to protect the government's intellectual rights to the information and to advise the reader of the rights granted to the public.

Similarly, "IA-5A09: Standard Laboratory Disclaimer for Internet/WWW Publications" combines a notice stating that machine use is subject to monitoring, a policy statement from the Administrative Manual, and disclaimers from the Publications Manual. These elements serve to protect the Laboratory and authors from potential legal liabilities.

Under the proposed guidance, both the copyright notice and the disclaimer can be linked from abbreviations on the Web, and both can be adjusted as needed to meet specific situations.

Where to Find the IA On-line Materials

From the Laboratory internal home page, proposed IA guidelines and standards can be found under "Info by Subject/Information Architecture Project/Proposed Guidelines, Standards, and Services."

http://www.lanl.gov:8000/info-arch/rfcs/htmls/idx-rfcs.html

Any comments you might offer are welcome. Access is limited to Laboratory-internal machine addresses.

Approved IA guidelines and standards are available on the open Web via the IA home page under "IA Guidelines and Standards," or under "Official Documents" from the Laboratory internal home page.

http://www.lanl.gov/projects/ia/stds/

These materials are open to the public.

For further information or to request an e-mail or printed copy of "IA-5A06: Guidelines for Publishing on the Open Internet/WWW," contact Tad Lane at 667-0886 or tad@lanl.gov.

Tad Lane, Information Architecture Standards Editor
Communications Arts and Services Group (CIC-1)

The LANL Web Mistress

The job of the Web Mistress is to respond to the needs of the Laboratory's Web users. Web Mistress Laurie McGavran of the Applications Programming Group (CIC-12) says that a year ago the Lab home pages pointed to just 18 servers. Today there are over 100 servers within the Laboratory and 29 of these were added in July, August, and September. In a recent indexing of Web resources within the lanl.gov domain, more than 15,000 documents were indexed.

McGavran can identify the top site visited (LANL home page—internal and external), the number of visits the site receives in a week (131,978 during the week of September 24-30), and the most popular pages the site points to (Phone Book, Info by Subject, and Info by Organization). About one-third of the "hits" on the Lab home pages are from external users, and McGavran can tell who these users are by their domains. The domains that contact LANL's Web the most are .gov (about 60% of the accesses), .edu, .com, Europe, .net, North America, and Asia.

As an integral member of the core Web team, the Web Mistress also tracks down the owners of databases and managers of servers to keep everything as up-to-date as possible. She routinely puts master management memos and administrative support memos on the Web (once they have been approved by Lorraine Ortega of CIC-10). She is presently running a prototype that connects to a database query to keep CIC's organizational information updated automatically. The database query was developed by the Network Group (CIC-5).

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Communications Arts and Services (CIC-1)

Standard HTML Reaches More People and Saves Time

With all the different Web browsers now available, creating HTML documents according to approved standards has become even more important. The only way to ensure readability for all Web users is to make sure your HTML documents are compliant with all Web browsers. By some estimates, over 30% percent of the browsers now in use on the Web are not Netscape, and most of these are either the Compuserve or the America On Line browsers that come with commercial network service. Remember that Netscape uses extensions to standard HTML that have not, and in some cases probably will not, be accepted by the W3 Consortium and IETF (Internet Engineering Task Force).

The Laboratory's Information Architecture (IA) Project has created an official Lab document, "TE-5815: Laboratory Standard HyperText Markup Language (HTML)," which is accepted by the W3 Consortium and IETF. The IA standard lists recommended HTML tags, along with background information, rationale, and links to other applicable resources. The list of recommended tags is maintained and updated regularly. Those of us on LANL World Wide Web (WWW) Team strongly encourage you to follow these guidelines to reach the widest possible audience and to reduce your chances of creating more work for yourself in the future due to noncompliance with accepted standards. The IA standard can be found at

http://www.lanl.gov/projects/ia/stds/te581510.html

To help you comply with standard HTML, you might consider using one of the programs now available on the Web (written by people outside the Lab) that will help you find errors and non-standard tags in your documents. These programs can download your HTML document, check it for compliance, and provide you with valuable feedback. All you have to do is supply the URL of your Web document. Although we have not thoroughly tested these services, they should be worthwhile. In the future, the Lab may offer a similar service that will check for conformance with the Lab's HTML recommendations. Below are URLs for three of these of these programs.

(1) http://www.halsoft.com/html-val-svc/

This service lets you select various levels of acceptable HTML. We recommend using level 2, strict, though it contains only a subset of all acceptable tags. If you're familiar with the other tags, you can use level 3, but understand that it allows tags that aren't recommended.

(2) http://www.khoros.unm.edu/staff/neilb/weblint/lintform.html

This service lets you disable the acceptance of Netscape extensions, making the document more universal. We recommend this practice.

(3) http://www.unipress.com/weblint/

This service seems to do a lot, but it doesn't distinguish between Netscape extensions and standard HTML.

If you have any questions, please contact the LANL WWW Team at www@lanl.gov.

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Distributed Computing Group (CIC-8)

What's on Your Mac's Desktop?

The basic run of the mill computer desktop usually contains some common characteristics like the trash can and various files and folders. However, this default configuration may not reflect your organizational preference and working style. There are a number of different ways to configure your desktop that can bring it more in line with your individual tastes. This article will look at some ways to configure the desktop environment for the Macintosh. This is by no means an exhaustive look at the subject, and many of the ideas presented here are basic features of the Mac OS. Still this article should present some ideas that will enhance your computer productivity.

Figure 1. Using an Alias Folder and Short Names

An Alias by Any Other Name

By default, the Mac has on its desktop the Trash Can, your start-up disk, and any other mounted disks (e.g., floppy, hard, removable, or network). But there's a lot more space on the desktop for other files, folders, etc. Since the release of System 7, the Mac has had the ability to create aliases of files, folders, and applications. An alias functions like a pointer that links to the original object. It's very small in size, and its name is in italics. (Windows 95 now brings the same functionality to the PC with Shortcuts.)

You can create aliases of commonly used items and then put them on your desktop. You can also put them in your Apple Menu. To do this, put the aliases in the Apple Menu Items folder, which is in your System Folder. Where you put aliases is a matter of personal preference. (Remember though, like your furniture desktop, it can easily become too cluttered.)

Icons on your desktop can only be shown in large icon view. If you have a big monitor, this doesn't matter much, and you can put them along the side or bottom of your screen. Also, with a big screen, you can create an alias of the Trash can and put it midway up on the side of the monitor. (Or you could move the Trash can.) However, if you do not have the luxury of a large screen, here's a trick you can use. Create a folder on the desktop, call it Alias Folder, and put your selection of aliases in there. Then you can open the folder and display the contents by small icon view. (See Figure 1.) To fit a lot of aliases in a small space, you could use abbreviated names. PageMaker becomes PM, for instance. (If you get too cryptic with your abbreviations, you still have the icons of the aliases to go by.) You could also display the folder by name view and put it on the left side of your monitor.

There are applications that put groups of aliases on the desktop for you. Apple makes Launcher, which only requires a single click on the icons. It only displays them with large icons, however, but has many other features. There is also the freeware Malph, which shows just the icons and no names. And, there are many other such applications available that do basically the same thing.

An Apple Menu Items Shortcut

The Apple Menu is a great productivity aid. System 7.5 brought us hierarchical submenus as part of the Apple Menu Options control panel. This allows you to more easily use folders in your Apple Menu. The control panel also allows you to keep track of your recently used documents, applications, and servers for easy relaunching. (This does require a little system overhead, however.)

The usual process of putting aliases into the Apple Menu is somewhat tedious. (You have to open the System Folder and then find the Apple Menu Items folder therein.) And putting an alias of the Apple Menu Items folder on the desktop may take up too much "screen real estate." A trick to get around this is to put an alias of the Apple Menu Items folder on the desktop under the Apple Menu and give it a null icon so that it only takes up enough space for its name. To do this, put an alias of the Apple Menu Items folder on the desktop. Then make sure there is some white area showing on the screen

(it can be very small). Take a screen shot by pressing Command Shift-Three (you will hear the sound of a camera click). This creates a PICT file in the root of your hard disk called "Picture 1." Double-click on this file. It will launch the Simple Text application. Now with the mouse pointer, draw a small rectangle in a blank white area and select Copy from the Edit menu or press Command-C. You now have a blank PICT resource in your clipboard.

On the Mac, you can change any icon's picture on the desktop. To do so, click once on the icon of the file, folder, or (in this case) the Apple Menu Items alias. Select Get Info from the File Menu or press Command-I. In the Get Info box, click once on the icon, which is in the upper left corner of the box. This will highlight the icon. Now paste in the "icon" that you just copied. This will paste a null icon for the alias, which will not take up room on the desktop. Then close the Get Info window.

There are (at least) two options for naming the Apple Menu Items alias. One is to call it "AMI" and the other is to name it " "; that is, just three or four spaces. (Click on the name of the alias to change it.) You can then drag the alias by its name field and put it right under the Apple in the menu bar. The example using spaces for a name is shown in Figure 2. I like this option because it is unobtrusive, showing only a small blank box.

So after you have done all this, now what? Well, you can now easily drag any alias to the blank box or the "AMI" under the Apple. You don't need to find the System Folder, Apple Menu Items folder, etc. You could also use the same idea for making other aliases on your desktop. You could create concise little aliases with only their names showing and no icons, thus saving desktop space.

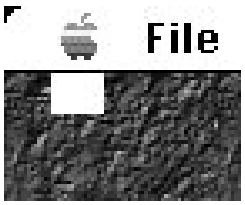


Figure 2. Apple Menu Items Alias with Blank Icon and Spaces for Name

StuffIt Expander and Utilities on Your Desktop

If you don't have StuffIt Expander, you should get it. It can unstuff, decode, and otherwise decompress all kinds of files. It is needed to download files on the Mac using Netscape and is just generally good to have around. You can get it via ftp from ftp.lanl.gov (look in the /pub/mac/utils folder) or have the friendly folks at the CIC-2 Mac Support Desk e-mail it to you by calling 5-1361.

Put StuffIt Expander on your desktop, down there by your Trash can because you will be dragging files on top of it to unstuff them. This is one utility worth having on your desktop and, depending on your needs, perhaps not the only one.

Other useful utilities include Drop•PS, which will print any PostScript file dropped on top of it. (Set your printer by double-clicking on Drop•PS, selecting Preferences from the File menu, and clicking on Set.) There is also a DropStuff utility that will compress any file dropped on top of it. This can be useful if you need to put big files on floppies or transport them on slow SLIP connections. Another useful utility to have is an alias of a text editor, such as SimpleText, so that you can drop text files on top of it to read them.

Other Productivity Aids

Another useful desktop aid, especially for small screens, is to use the WindowShade control panel. With WindowShade you can configure your desktop so that if you double-click (or triple-click) on a window's menu bar, the window will "roll up" to the size of the menu bar. Double-clicking it again brings the window back. (See Figure 3.)

Another useful trick to remember is if you hold down the Option key when you click outside of a running application, the application will be hidden. And holding down the Option key while opening up a folder will automatically close its parent folder. Also, when you are in the Finder, if you hold down the Command key while clicking on the name of a Window, you can move up the directory tree of that file or folder. And don't forget the zoom box. If you click on the zoom box in the upper right corner of a window, it will size that window to exactly fit its contents (without scroll bars). (Windows 95 could definitely use this feature.)

There are two features I like on the PC that are not on the Mac: (1) not having to hold the mouse button down when you pull down menus and (2) being able to use the keyboard to switch between applications. The first feature can be obtained from the Now Menu portion of the commercial package of Now Utilities or from the shareware package AutoMenus Pro.

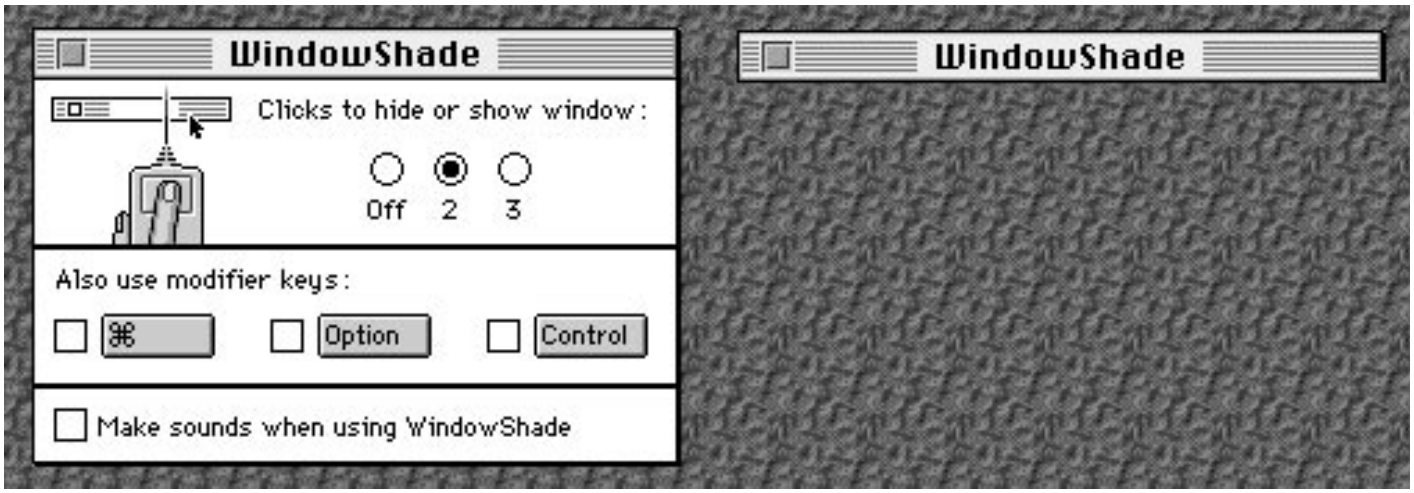


Figure 3. WindowShade Control Panel (Before and After)

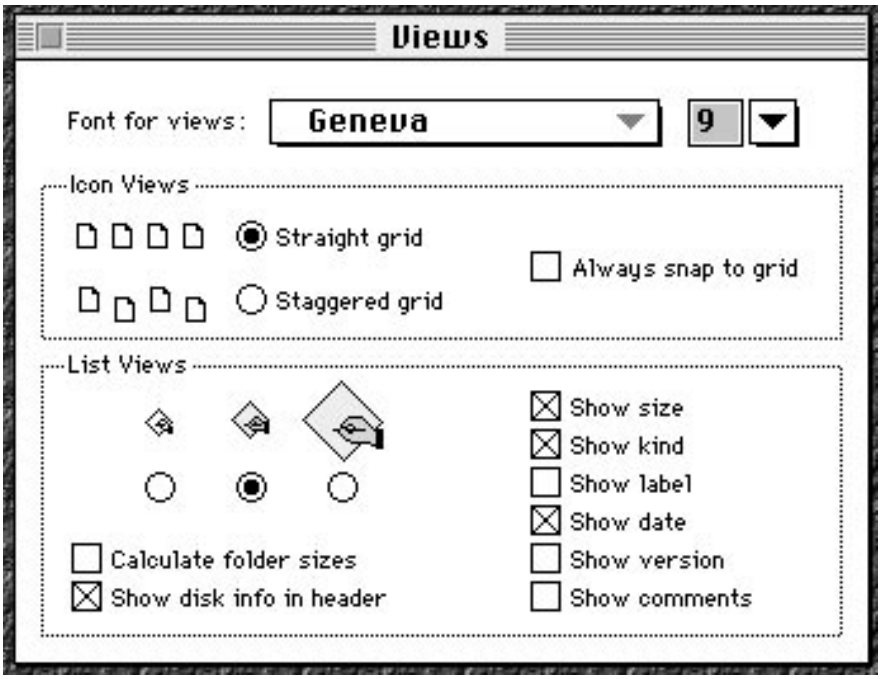


Figure 4. The Views Control Panel

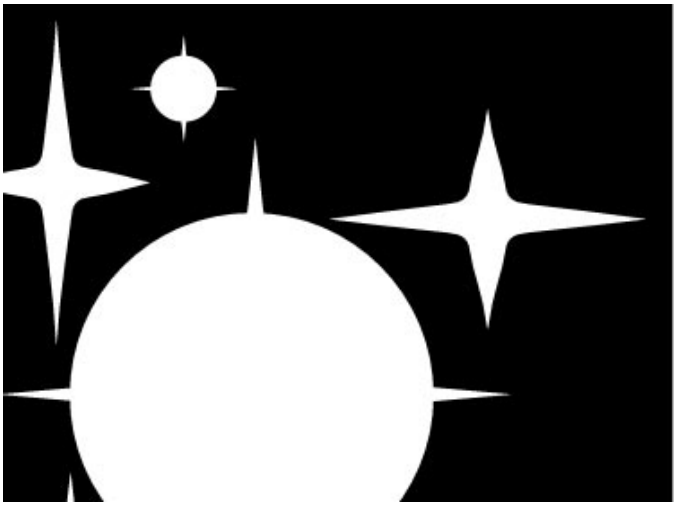
The second feature is included with the Office Manager portion of Microsoft Office. (Which is a lot of money to spend for just this feature to be sure.) It is also available from the shareware package called Program Switcher. The second feature lets you press Command-Tab (or some other key combination) to flip through your open applications. (Be advised that whenever you add third-party extensions to your Mac, you run the risk of system conflicts.)

Finally, don't forget to customize the Views control panel to your liking. I like to configure it with the middle-sized icon selected under List Views and the Show label box not selected. (See Figure 4.) You should play around with this control panel and find the configuration that best suits your tastes.

For help with these and other Mac issues, call the CIC-2 Mac Support Desk at 665-1361. For help with getting your Windows desktop into shape, call the PC software support desk at 667-5884.

John Layne, jpl@lanl.gov
Desktop Group (CIC-2)

New AIX Parallel Environment and HPF Products Now Available on the Open IBM Cluster



Bob Boland, wrb@lanl.gov, (505) 667-1729
Distributed Computing Group (CIC-8)

The AIX Parallel Environment and 3Q1995 Beta HPF products are now installed on all the IBM cluster nodes here at LANL. This installation represents the second version of the formal HPF beta test program; the official products are scheduled for release early in calendar year 1996.

The new compiler invocations are located in /usr/bin and are called xlhpf and xlhpf90. The xlf and xlf90 invocation commands are also provided with HPF (for compiling non-HPF code) and are installed in /usr/lpp/xlhpf/bin. IBM recommends that you do not use HPF beta to compile non-HPF code for production application programming. When using HPF, avoid library conflicts by setting the LIBPATH environment variable to /usr/lpp/xlhpf/lib.

There are several documentation files available on-line. The latest README.xlhpf file is available in /usr/lpp/xlhpf/DOC; this is a native text file. The directory /usr/lpp/xlhpf/postscript contains several manuals which you may wish to study. The Language Reference (xlflr.ps.Z) and User's Guide (xlfug.ps.Z) are taken from XL Fortran Version 3.2, so you may not need to print these books. The HPF for AIX Beta Guide (xlhpf.ps.Z) is new. It contains information on using the HPF features of this product. You can print any of these manuals from /usr/lpp/xlhpf/postscript using a command similar to

zcat <filename.ps.Z | ppages -ft ps -format ltr -ds -punch

Please send your questions, comments, and bug reports to me, Bob Boland, at wrb@lanl.gov. IBM is very interested in our feedback on this product.

Lab-Wide Systems Training

The Customer Service Group (CIC-6) offers training for users of Laboratory information systems. The CIC-6 courses offer training for a variety of personnel including property administrators, group secretaries, training coordinators, budget analysts, group leaders, or anyone needing to access training records, property records, costs, employee information, travel, chemical inventories, etc. Refer to the table below and on the following pages for specific information about courses currently offered.

Course Registration

You must have a valid ICN password before taking any of the courses shown in the table. To register for a course, call CIC-6 Training, Development, and Coordination section at 667-9444. You will be sent a registration form to be completed and returned.

Course Title	Date	Time	Cost	Course Number
Administrative ToolKit	**12/13/95**	**8:30 - 12:00**	**$260**	**Course #11395**
	A combination of the Directory Information, Signature Authority, TRIPS, and STORES system classes. The student will learn how to update directory information, assign signature authorities (purchase, SIGMA, etc.), submit travel requests, and purchase materials on-line. Reporting and printing for each system will also be covered.			
Automated Chemical Inventory System (ACIS):	**Scheduled Upon Request**		**$260**	**Course #7480**
	Participants receive hands-on instruction to update the status (end-user,location, quantity) of chemical containers. Participants will also learn to generate chemical inventory reports by chemical name, end-user, location, and organization.			
Budget Computing System (BUCS):	**Scheduled Upon Request**		**$260**	**Course #3527**
	This training is an introduction to the Budget Computing System (BUCS). Students practice generating "quick reports" and reports requiring parameter files. An introduction and demonstration of (no "hands-on") allocating procedures are given during the three-hour session.			
Employee Development System - Basic Training (EDS I):	**12/6/95**	**8:30 – 12:00**	**$260**	**Course #5289**
	The course provides hands-on instruction to request course enrollment, use the on-line course catalog, retrieve training transcripts, and assign EDS authorities. The student will learn to create courses, add students to the courses, and generate several training reports.			
Employee Development System - Training Plans (EDS II):	**12/20/95**	**8:30 – 12:00**	**$260**	**Course #7155**
	Participants receive hands-on instruction to create and maintain training plans, assign assignment codes, and generate training plan reports. Attendees must have prior training in the Employee Development System (course #5289).			
Eudora Electronic Mail	**12/20/95**	**1:30 – 3:30**	**$130**	**Course #9762**
	This class is a hands-on class that teaches the participant how to use Eudora software to create, send, receive, and edit electronic mail messages. In addition to these procedures, the participant will learn what related settings mean and how to configure the system to meet his or her individual needs.			
Financial Reporting System	**12/12/95**	**8:30 – 11:30**	**$260**	**Course #11050**
	Students will receive hands-on training to generate standard financial reports and make on-line queries from information in the "data warehouse," a collection of data from Laboratory budgeting, accounting, and time-keeping systems.			

Course Title	Date	Time	Cost	Course Number
Facilities Project Information/Work Orders (FPI/WO):	**Scheduled Upon Request**		**$260**	**Course #6996**
	Lab-wide users with a need to view the status of work orders and tickets in their organizations will receive hands-on instruction to request, print, and review work order, ticket and project summary information reports.			
Financial Management Information System (FMIS):	**12/14/95**	**8:30-12:00**	**$260**	**Course #8338**
	Participants receive hands-on instruction to "explode" and "transfer" through the costs, allocations, and outstanding commitments screens. In addition, participants will create/review reports, access the Information Manager Utility for printing reports, and learn how to assign authorities in the system.			
Hazardous Materials Transfer Tracking System for Nonradioactive Material (HMTTS/NRAM):	**Scheduled upon request**		**$260**	**Course # 7907**
	Participants receive hands-on instruction to create, update, and print the non-RAM Hazardous Materials Transfer Form (HMTF). Attendees must have completed "Completing the HMTF for Non-RAM," course #7512, sponsored by HS-8.			
Hazardous Materials Transfer Tracking System for Radioactive Material (HMTTS/RAM):	**Scheduled Upon Request**		**$260**	**Course #7993**
	Participants receive hands-on instruction to create, update, and print the Radioactive Materials Transfer Form (RMTF). Information about the non-RAM Hazardous Materials Transfer Form (HMTF) is included. This course is appropriate for people who fill out both RAM and Non-RAM forms. Attendees must have completed "Completing the RMTF," course #7517, sponsored by HS-8.			
Introduction to the Internet: Beginning Netscape	**12/15/95**	**8:30 – 10:30**	**$130**	**Course #10961**
	Students gain basic understanding of the Internet and the World Wide Web and the use of Netscape as a browser to surf the Net. Topics covered are both Laboratory sites and open sites, along with practical uses of the Internet.			
Introduction to LANL Information Systems	**12/18/95**	**1:30 – 3:30**	**Free**	**Course #10118**
	This three-hour class is a hands-on introduction to the information systems available to Laboratory-wide users. The participants will become acquainted with Lab-wide information systems such as TRIPS and Stores, Electronic Mail, and Netscape (an interface to Laboratory information).			
Key/Core System	**12/21/95**	**8:30 – 10:30**	**$130**	**Course #10179**
	Key custodians and alternate key custodians receive hands-on instruction to add, update, and delete key and padlock information, and view assignment information and request reports. Students will also learn how to request key inventory notifications. Students must be a key custodian or alternate and have an ICN password.			
Lotus Notes Basic Concepts	**Scheduled Upon Request**		**$260**	**Course #9917**
	This class provides hands-on instruction for Mac and PC users to use Lotus Notes software to create and send E-mail memos; fax documents; search databases; create filters, nicknames, banners, and doclinks; set defaults; and use multiple address books. In addition, participants learn how to use the memo, meetings, and discussion databases.			
On-Line Forms	**12/19/95**	**8:30 – 10:30**	**$130**	**Course #9756**
	Participants will learn to use Netscape software to access Lab-wide information and forms. Using Jetform Filler software, participants will access, complete, and print forms such as the "ICN Validation Request," "Visitor Request for Unclassified Visits to Security Areas," and "Request			

Course Title	Date	Time	Cost	Course Number
Property Accounting, Inventory, and Reporting System (Advanced)	**Scheduled upon request**		**$260**	**Course #9918**
	This course will include a refresher of PAIRS, advanced techniques and tips, explanation of the notification system, and report capabilities. Swap Shop, Loan Out information, and support tables will be discussed. Participants should already have a basic understanding of and know how to use PAIRS.			
Secretarial/Contract Services (SE):	**Scheduled upon request**		**$260**	**Course #7481**
	This class provides hands-on instruction for creating secretarial requests for temporary services, entering time for technical and nontechnical contract employees, and creating reports using the Information Manager Utility. The students will also learn how to review notifications and approve attendance. A training database will be used for the class.			
Time and Effort System	**12/19/95**	**1:30 – 5:00**	**$260**	**Course #11018**
	The student will learn how to enter attendance, amend attendance, approve attendance, and submit exception and approval reports. Time codes and associated policies will also be discussed. In addition, the student will learn how to use the Information Manager utility to view and print reports.			

CIC Computing Classes

CIC offers a variety of computing courses for the professional development of Laboratory employees. The courses listed in Table 1 will meet at the time and the date shown. The date for courses in Table 2 are not known at this time.

Course Registration

To register: (1) check the box beside the appropriate course, (2) complete the Enrollment Information section below, and (3) follow the mailing instructions on the back of this form. Submittal of a Course Registration form does not guarantee participation in an advertised class, but it is the only way to get into the queue for notification of upcoming classes. Classes are conducted in a secure area unless noted; uncleared participants require escorts. Call the Vendor Training Coordinator at 667-9399 for more information.

Table 1 Courses with confirmed time and date

	COURSE TITLE	INSTRUCTOR	COST	DATES
☐	C Programming (Beginning)	Michael Chase, Boulder Software Group	$780-$1100 (depending on enrollment)	1/8/96 through 1/12/96
☐	Common Object Request Broker Architecture (CORBA)	IONA expert	$1247.50 -$914.50 (depending on enrollment)	week of 1/22/95 and/or 1/29/95
☐	SUN Solaris 2.X System Administration	Jon Nouveaux, Sun Microsystems Expert	$1750-$2000 (depending on enrollment)	1/15/95 through 1/19/95 (4.5-day class)
☐	UNIX (Beginning)	Ted Spitzmiller & Jeffrey Johnson	$738	1/8/96 through 1/12/95 (morning only)

Table 2 Courses with date to be arranged (TBA)

	COURSE TITLE	INSTRUCTOR	COST	DATES
☐	C Programming (Advanced)	Boulder Software Group	$780-$1150 (depending on enrollment)	TBA (5-day class)
☐	SUN Solaris 1.X (SunOS 4.X) Advanced System Administration	Sun Microsystems Expert	$1750-$2000 (depending on enrollment)	TBA (4.5-day class)

Note: Detailed course descriptions for most classes provided on the following pages.

cut along dashed line

Enrollment Information

Name _____

Phone _____ Z-Number _____

Group _____ Mail Stop _____

Program Code* _____ Cost Code* _____

Group Leader Signature _____

****Enter program code and cost code for all courses. If you need to withdraw from a class fewer than 5 working days before the class is scheduled to begin, your group will still be charged. Substitutes may be sent, but please let the CIC Division Training, Development, and Coordination Office (667-9399) know who your substitute will be.***

Do Not Staple
Fold on This Line First

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 88 LOS ALAMOS NM

POSTAGE WILL BE PAID BY THE ADDRESSEE

MAIL STOP B296
CIC DIVISION TRAINING DEVELOPMENT
AND COORDINATION TEAM
LOS ALAMOS NATIONAL LABORATORY
PO BOX 1663
LOS ALAMOS NM 87544-9916

Do Not Staple, Seal with Tape
Fold Here

C Programming (Beginning)

Prerequisite: An understanding of the useful skills in a high-level programming language.
A current ICN password is required.

Location: CIC-Division Classroom, TA-3, SM-200, Room 210 (secure area).

Enrollment: Minimum 10, Maximum 16.

Topics: Introduction and Fundamentals; Basic Semantic Constructs—Getting Started; Base Level I/O with C; The Preprocess-Compilation Environment; Operators, Data Types, and Storage Classes; Control Flow Constructs; Conditional Constructs; Higher-Level Data Constructs in C; File I/O; UNIX Software Tools; and POSIX System Calls.

C Programming (Advanced)

Prerequisite: Useful skills and experience with the C Programming language.

Location: CIC-Division Classroom, TA-3, SM-200, Room 210 (secure area).

Enrollment: Minimum 10, Maximum 16.

Topics: Data Structures, Algorithms, and OOP; An Advanced Clinic for C Programmers; The ANSI C Recommendation X3.159; C and ANSI C War Stories; The Data Structure and the Assessment of Algorithms; Arrays; Structures; Unions; Stacks; Queues; Linked Lists; Recursive Functions; Binary Trees; Hashing; File Organizations Using the C Runtime Library; Standard Interprocess Communication Mechanisms; An Introduction and Overview of AT&T's C++ 3.0; and Appendix: references for periodicals, journals and texts.

Common Object Request Broker Architecture (CORBA)

Prerequisite: No prior knowledge of parallel programming required; some development experience in UNIX and in at least one of Fortran, C, or C++ is required.

Location: CIC-CTI Classroom; TA-3, SM-200, Room 115.

Enrollment: Minimum 10, Maximum 16.

Topics: Introduction to Parallel Programming (Definitions, Parallel Architectures and Algorithms, Parallel Programming Approaches, Program Partitioning and Mapping, Important Issues, Applications); SP2 System Overview; SP2 Parallel Environment (Overview, Compilers, Resource Management - partition manager, Parallel Program Visualization, Profiling Parallel Programs, Message Passing Library (MPL)); Parallel Virtual Machine Extended (PVMe); Parallel Programming Workshop (predetermined labs of varying difficulty; in language of choice); and Optional Topics (Parallel Databases, Parallel I/O).

UNIX (Beginning)

Prerequisite: Familiarity with a UNIX workstation.

Location: CIC-Division Classroom, TA-3, SM-200, Room 210 (secure area).

Enrollment: Minimum 8, Maximum 10.

Topics: Overview of the Workstation environment; Getting Started; The UNIX File System; Manipulating Files; Customizing Your Environment; The C-Shell; Editing and Writing with vi; Using the Network; Discussing NFS and NIS; Using basic system status commands; Startup and shutdown procedures; Using tar.

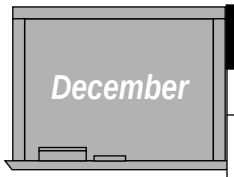
Research Library Training

The LANL Research Library provides training for using its specialized databases. Training sessions begin at times indicated below. Classes are scheduled for half an hour, except for "Information Sources on the Internet via WWW" which is two hours. Space is limited to 8 per session. Classes are free, but you must pre-register by calling the Research Desk at 7-5809 or sending e-mail to library@lanl.gov. Special classes and orientations can also be arranged.

Date	Time	Subject Matter
12-5-95	1:00 p.m.	Commercial Information for Patent Applications
12-7-95	10:00 a.m.	Information Sources on the Internet via WWW
12-7-95	1:00 p.m.	ABI/Inform Business Database
12-12-95	1:00 p.m.	Finding Unclassified and Classified Report Literature
12-13-95	11:00 a.m.	MELVYL (U of CA specialized databases)
12-14-95	1:00 p.m.	SciSearch on the Web
12-14-95	2:00 p.m.	Information Sources on the Internet via WWW
12-19-95	1:00 p.m.	ABI/Inform Business Database
12-21-95	10:00 a.m.	Information Sources on the Internet via WWW

ICNchanges Contents

Change Control for December 1995



Schedule for Change Control

Date	Activity
December 5 (First Tuesday)	New or changed software is available in experimental (**X**) files on CFS for testing. This initial testing period is for uncovering problems in the software before the software is put into production. If you find a problem, please call the ICN Consulting Office at (505) 667-5746.
December 12 (Second Tuesday)	The changes become production version on • Machines **epsilon**, **rho,** and **zeta** (UNICOS) • Distributed processor **beta** (AIX) • Distributed processor **ccvax** (VMS)
December 21 (Third Tuesday)	If no problems are reported to the ICN Consulting Office (505) 667-5746, changes are installed on • Machines **delta** and **gamma** (UNICOS)

Note: A stop sign in front of a title is significant:

STOP **= incompatible changes; please read!**

Editor's Note

Beginning with the February 1996 issue, ICNchanges will no longer be available in hard copy or published in the *BITS*: *Computing & Communications News*. Information about Change Control will continue to be available as it is today by linking to the following Web page:

http://www.lanl.gov/computer-information/ICNchanges

Please try this link and if you have any suggestions or comments contact Bob Ayars (DDCIC) at (505) 667-9047 or **rsa@lanl.gov**. After January 1, 1996 the changes will be announced by e-mail. If you want to be added to the Change Control e-mail list contact Barbara Ritchie at (505) 667-7275 or **bxr@lanl.gov** to be notified as information about changes becomes available on the Web.

Deletions

This section lists utilities and services that are targeted for deletion or have already been removed from the systems listed.

Stop DELETIONS (UNICOS)

These tools are being removed from all UNICOS systems during the December 1995 Change Control cycle. For more details please see the Feature Articles section in the October 1995 issue of *BITS*.

ARCHIVE	**MVI**	**TOP**
CGM Library	**OLD NCAR**	**VT2HOST**
DEARCHIVE	**RASVIEW**	**VT2PC**
INDEX	**TIDY**	**XEQ**

GAS — third party software — support will be available as noted on the **support** man page.

Changes

ACFS (UNICOS)

Function Advanced CFS (ACFS) is a utility that enhances the CFS interface.

Change The "al[l_roots_owned_by]" keyword for the "l[ist]" command now works on the secure UNICOS machines. This change will not be apparent to the user on the Open UNICOS machines.

X File Access On CFS as: /**ccxs/unicos/bin7/acfsx** for Machines Delta and Epsilon.
On CFS as: **/ccx/unicos/bin8/acfsx** for Machines Gamma and Rho.

Online Documentation To display the man page (dated 9/94), enter: **man acfs**

Stop VTOU (UNICOS)

Function VTOU converts VMS files from variable length record format to UNICOS text file format.

Change At the request of a user it was decided not to remove **vtou** from any UNICOS system. Please note that **vtou** has been removed from the deletions list.

Network Services Information

This section provides information and a record of changes to the software and hardware that make up the ICN network and the services it provides. If you detect a problem, please call the ICN Consulting Office at (505) 667-5746, or send electronic mail to **consult@lanl.gov**.

Stop Group Manager (UNICOS)

Function Manages the Group ID (GID) and name space for all UNICOS machines in a single network.

Change Group Manager is a new utility. All UNICOS users may create their own file-sharing group using Group Manager, and may add or delete users from the groups they have created. Group assignments are automatically propagated to all other UNICOS machines in the same security network.

X File Access No experimental (**X**) files
Currently available on Machines Gamma and Rho, and on secure machines running UNICOS 8.0 or later (**sigma**, **tau**, and **zeta**).

Online Documentation To display the man page (dated 12/95), enter: **man grpmgr**

Documentation

New and Updated Man Pages

The following online information has been added or updated.

UNICOS Man Pages

To access a UNICOS man page, enter: **man** *command_name*, where *command_name* is the name of the command, library, routine, or utility whose man page you wish to view.

Man Page	Description
Group Manager	Group Manager manages the Group ID (GID) and name space for all UNICOS machines in a single network.

To create ASCII files of the UNICOS man pages, use the following command to remove the special characters for bold and underlining:

UNICOS 7.0 and 8.0: **man** *command_name* **| col -bx >** *filename*

Barbara Ritchie (**bxr@lanl.gov)**, (505) 667-7275
Communication Arts and Services (CIC-1)

Information About Change Control

ICN Change Control is the set of procedures that coordinates changes in the ICN to ensure quality control and smooth operation and to avoid introducing additional problems. In an environment as dynamic as the ICN, control must be imposed on the scope and timing of changes that involve many components. Please report any problems as soon as they occur by calling the ICN Consulting Office at (505) 667-5746.

The following CFS nodes are used for software that is maintained or announced through Change Control procedures. The files under **/ccx(s)/unicos** are deleted the last Friday of each month because these experimental versions become the production versions on all machines by the third Tuesday of the month. The other nodes keep the most recent versions of their respective software.

Non-UNICOS Systems	/*cc-node*/*platform*/*filename*
UNICOS Systems	/*cc-node*/**unicos**/*type*/*filename*

Where *cc-node* is:

ccx	Open change-control root node examples: **/ccx/mac/ppages** **/ccx/unicos/bin7/ppagesx** **/ccx/unicos/ubin7c/tedix** **/ccx/vax/ppages.bak**
ccxs	Secure change-control root node examples: **/ccxs/unicos/lib8/libcftlib.a** **/ccxs/sun/ppages.tar**

Where *platform* is:	Where *filenames* are:
aix	current executables for IBM RS6000-370 with AIX OS on Beta
alpha_osf	tar files for DEC Alpha OSF/1 machines
alpha_vms	backup save sets for DEC Alpha VMS machines
convex	tar files for Convex machines
dec_risc	tar files for DEC RISC workstations
dos	executables (**.exe**) for PC/DOS machines
hp	tar files for Hewlett-Packard workstations
ibm_rs6000	tar files for IBM RS6000 workstations
mac	binhex (**.hqx**) or MacBinary (**.mbin**) files for Macintosh computers
next	tar files for NeXT workstations
sgi	tar files for Silicon Graphics workstations
solaris	tar files for Sun Solaris workstations
sun	tar files for Sun OS workstation
unicos	executable **X** files or library files for current Change Control cycle
vax	backup-save-sets for VAX/VMS systems

Where *type* is:

bin#	binary files for version # of the operating system; note that an "x" is appended to the binary filenames
lib#	library files for version # of the operating system
u	user-supported executable files (**ex**, **ubin**, **ulib**, **udata**, **usys**)

If problems are discovered during the cycle, defective hardware or software is corrected, replaced, removed, or backed off.

Online Information

You can access complete online information about Change Control by linking to the following Web page:

http://www.lanl.gov/computer-information/ICNchanges

The Web page includes this menu:

Keyword Search of all ICNchanges (?)
Current (*month year*)
1995 Archives
1994 Archives
1993 Archives
1992 Archives
1991 Archives

Once you select a particular issue of ICNchanges, you then select which of these formats to use for viewing the articles:

ICNchanges - ASCII Version
ICNchanges - HTML Version
ICNchanges - Acrobat Version
ICNchanges - PostScript Version

*Barbara Ritchie (**bxr@lanl.gov**), (505) 667-7275*
Communication Arts and Services (CIC-1)

CCF Machine Availability and Downtime

Machine Name(s)	Machine Type	Operating System	Security Partition	System Availability (October 1995)	Scheduled Downtime*
delta	CRAY Y-MP8/8-128	UNICOS 7.0	Secure	99.6	None
epsilon	CRAY Y-MP8/8-128	UNICOS 7.0	Secure	99.4	None
rho	CRAY Y-MP8/8-64	UNICOS 8.0	Open	99.6	None
zeta	CRAY Y-MP8/2-64	UNICOS 8.0	Secure	98.4	None
gamma	CRAY Y-MP/M98-82048	UNICOS 8.0	Open	99.6	None
sigma**	CRAY T94/4-128-2	UNICOS 9.0	Secure	97.5	December 13 — 0400-0700
tau**	CRAY T3D MC512-8	MAX 1.2	Secure	98.0	December 20 — 0400-0700
	CRAY Y-MP4I/464-2	UNICOS 8.0			
pi**	CRAY Y-MP EL92/1-256	UNICOS 8.0	Open	100%	
cluster	IBM Workstation Cluster	AIX	Open		
beta	IBM RS6000-370	AIX	Open		
ccvax	VAX 6410	VMS	Open		
canyon	VAX 6410	VMS	Open		
pobox1663	Sparc 20	Sun OS 4.1.4	Open		
canyon	TMC CM200	SunOS	Secure		
tres	TMC CM200	SunOS	Secure		

* Additional downtime for the Cray machines may occur as a result of Network Dedicated Systems Time (NDST). The schedule for possible NDST is from 0600-0700 Mountain Time, Monday through Thursday. Should NDST become necessary, a message listing the scheduled downtime will be broadcast on the applicable machines before the actual downtime occurs. For additional information contact the shift supervisor at (505) 667-4584. All times listed are Mountain Time.

** Access restricted.

Questions About Announced Changes?

Notice of all scheduled downtime will be broadcast on the machine before the downtime. For up-to-date machine status and scheduled downtime call: CCF Status Message (505) 667-5588.

Publication Information

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Accessing Computing Machines through the ICN

This table shows how to access open machines on the ICN through MICOM lines, TCP/IP hosts, and DECnet hosts. Additional machines outside the ICN are accessible through TCP/IP and DECnet. To access any of these machines, except for LIS, you must first establish an ICN account, which includes obtaining an ICN password and registering as an ICN user (contact the CIC Customer Service Center for details).

Example: Suppose you want to access the REGISTER machine from MICOM. By referring to the table, you can see that the appropriate command to enter is TIG. Once you connect to the TIG, enter your ICN user number and password as prompted. At the TIG prompt (tig>) enter register and login to the register machine.

TO → / FROM ↓	Hosts reachable from MICOM Lines:(BETA, CANyon, CCVAX, TYMNET, LIS)	TCP/IP Hosts: (BETA, CCVAX, IBM Cluster IOVAX, OFVAX, REGISTER, UNICOS, ACL Hosts, etc.)
MICOM Lines	hostname	TIG TELNET hostname
TCP/IP Hosts (e.g., TIG)	TELNET MICOM hostname	TELNET hostname

Accessing the ICN through Dialup Modem

Dialup access to the ICN is available through the Terminal Internet Gateway (TIG). The TIG is a gateway to the internet and allows you to telnet to ICN machines as well as other machines. Configure your modem and terminal for 8 bit, no parity, one stop bit. Based on your modem, select the appropriate number listed in the table to dial into the TIG. Then enter your ICN user number and password as prompted. At the TIG prompt (tig>) enter a machine name or IP address.

Report problems to the Network Control Center at 667-7423 Monday through Friday, 6 am to 6 pm or at 667-4585 during non-business hours.

Type of Access	Phone Numbers
Microcom Modems from 300 to 28,800 b/s	(505) 667-9020, 9021, 9022, 9023 (Number of Lines: 16) (800) 443-1461 (Number of Lines: 10)
Microcom Modems from 300 to 14,400 b/s	(505) 667- 9024 and 9025 (Number of Lines: 48)
Note: Use the next phone number if the first does not answer properly.	
	Revised August 1995

Los Alamos
National Laboratory

INTEGRATED COMPUTING NETWORK (ICN) VALIDATION REQUEST

To access ICN Computing resources, please complete all parts of this form that apply to you, including "Special Requirements."

If you have **questions**: Call: (505) 665-1805
E-mail: validate@lanl.gov

Mail your completed application to:
ICN Password Office (PWO)
Mail Stop: B271
Los Alamos National Laboratory
Los Alamos, NM 87545

All Laboratory computers, computing systems, and their associated communication systems are for official business only. By completing this request, users agree not to misuse the ICN. The Laboratory has the responsibility and authority to perodically audit user files.

Owner Information

Z-Number (if you have one)	PWO Use Only	Name (last, first, middle initial)
LANL Group	LANL Mail Stop	Citizenship (Foreign National see "Special Requirements-Foreign National")
Phone Number	Cost Center	Program Code

Check LANL affiliation:

- ☐ LANL employee
- ☐ Contractor _____ (specify contract company)
- ☐ Consultant, VSM, associate
- ☐ External user_____ (specify employer)
- ☐ Other (specify)_____

Send password / smartcard to:

☐ Mail Stop or ☐ Mail to address indicated below

Name / Organization
Address
City, State, Zip Code

Access Check access method and needed partitions:

Access method: ☐ ICN Password ☐ Smartcard ☐ Both

☐ **Open** partition (e.g., email systems, open machines)

☐ **Administrative** partition (e.g., IA [BUCS, Stores, Travel], IB [EIS, FMIS, PAIRS])
If you are not a Q-cleared LANL employee, see required steps in section "Special Requirements-Administrative Partition," unless you already have Administrative access with an ICN password.

☐ **Secure** partition (i.e., secure machines)
Indicate level(s) of data to be processed:
- ☐ Unclassified
- ☐ Secret

I certify this person does require secure access:

_____ _____
Manager Signature (Group Leader or above) Date

NOTE: A Q-clearance is required. All classified computing must be performed within the Secure environment.

PWO Use Only

New ☐ Change ☐	Clearance Status	Processed	Lv	Smartcard Serial #
Comments:				

Form 1646 (1/95) Supersedes previous versions (rev. 1/25).

Continue

CUT ALONG DASHED LINE

Special Requirements

Administrative Partition (U.S. Citizens Only)	Lab-Wide Systems (e.g., IA [BUCS, Stores, Travel], IB [EIS, FMIS, PAIRS])
☐ Under 18 years of age	If you need to access Administrative systems, your group leader must provide a memo accepting responsibility for your actions and justifying your need for access This memo is to accompany all forms taken to the security briefing (see "Contractor or Non-Q-Cleared") section below. You may not access the Secure Partition.
☐ Contractor or Non-Q-Cleared	Phone (505) 667-9444 to obtain Access Authorization packet. Phone (505) 667-9153 to schedule a security briefing. Bring all forms including this ICN Validation Request to the security briefing for approval.

Security Briefing Approval Signature	Date

☐ Foreign National

Attach a copy of Form 982 (REQUEST FOR UNCLASSIFIED VISIT OR ASSIGNMENT BY A FOREIGN NATIONAL) with all approval signatures. Be sure Box #11 of Form 982 is completed. If you are not a visitor/assignee under a LANL/DOE approved Visit / Assignment Request, attach written justification from your host Division Director describing your need to access the ICN.

Authorization (required)

Print Manager Name (Group Leader or above)	Manager Z-Number	Group
Manager Signature (Group Leader or above)	Mail Stop	Date

If you are NOT a LANL employee, obtain your LANL contact's signature in addition to the contact's manager's signature.
NOTE: LANL contacts are regular Laboratory employees. Contacts are responsible for obtaining annual re-authorizations, forwarding renewals, and notifying the ICN Password Office of changes in user or contact status.

Print LANL Contact Name	Contact Z-Number	Phone Number	Group
LANL Contact Signature		Mail Stop	Date

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